

27. (New) A display device comprising:

- a pixel portion having a first region and a second region;
- a plurality of first pixels arranged in a matrix form in the first region;
- a plurality of second pixels arranged in a matrix form in the second region;
- a plurality of first gate signal lines arranged in the first region; and
- a plurality of second gate signal lines arranged in the second region,

wherein the plurality of first gate signal lines do not extend into the second region and the plurality of second gate signal lines do not extend into the first region, and

wherein while one of the first gate signal lines is supplied with a selection signal, a selection signal starts to be supplied to one of the second gate signal lines, and then while said one of the second gate signal lines is supplied with said selection signal, a selection signal starts to be supplied to another one of the first gate signal lines.

A3  
concl.

#### REMARKS

Applicant will address each of the Examiner's rejections in the order in which they appear in the Office Action.

#### Claim Rejections - 35 USC §103

In the Office Action, the Examiner rejects Claims 1-2 and 23-24 under 35 U.S.C. §103(a) as being unpatentable over Hebiguchi. This rejection is respectfully traversed.

Independent Claim 1 of the present application states:

“the selection signal starts to be supplied to the second gate signal line G1R while the selection signal is supplied to the first gate signal line G1L; and

the selection signal starts to be supplied to the first gate signal line G2L while the selection signal is supplied to the second gate signal G1R.”

Independent Claim 23 has a similar limitation. Figure 2 in the present application provides a good illustration of the selection signal starting to be supplied to G1R while the selection signal is still being supplied to G1L.

The Examiner contends that Heibiguchi shows:

“the selection signal starts to be supplied to the second gate signal line (Gd2) while the selection signal is supplied to the first gate signal line (Gd1); and the selection signal starts to be supplied to the first gate signal line (Gd1) while the selection signal is supplied to the second gate signal (Gd2).”

The Examiner, however, does not cite where in Heibiguchi this feature is disclosed or suggested. Applicant has reviewed the reference and cannot find any teaching of the claimed feature.

Hence, Applicant respectfully submits that the display device of independent Claims 1 and 23 is not disclosed or suggested by the cited reference, but instead the claims are patentable thereover.

For similar reasons, Applicant does not believe that the display device of independent Claims 2 and 24 is disclosed or suggested by the cited reference but instead these claims are also patentable thereover.

Accordingly, it is respectfully requested that this rejection be withdrawn.

The Examiner also rejects Claims 3-10 under 35 USC §103 as being unpatentable over Heibiguchi in view of Akebi, and Claims 11-22 under 35 USC §103 as being unpatentable over Heibiguchi in view of Yamazaki ‘886. Each of these rejections is also traversed.

Since the independent claims are patentable over the primary reference, and the other references are not cited to disclose the features of the independent claims, the dependent claims also

are patentable over these references. Accordingly, it is respectfully requested that these rejections also be withdrawn.

For at least the above-stated reasons, it is respectfully requested that the rejection of the claims over the cited references be withdrawn, and the claims allowed.

#### Amendments To Claims and Drawing

Applicant is amending Claims 1 and 24 to correct typographical errors in the drafting of the claims. These amendments are supported, for example, by Fig. 2 and page 6, ln. 16 to page 9, ln. 8 of the specification.

Figure 2 is also being amended to correct a clear typographical error.

No new matter is being added by these amendments. Accordingly, it is respectfully requested that these amendments be entered and allowed.

#### New Claims

Applicant is adding new Claims 25-27 to further claim the present application.

The fee for the new claims has been calculated as shown below.

	Claims Remaining After Amendment		Highest Number Previously Paid For	Present Extra	Rate	Fee
Total	27	-	24	3	(small entity) x 9  (others) x 18	\$54.00
Independent	7	-	4	3	(small entity) x 42  (others) x 84	\$252.00
Multiple Dependent (First Presentation)					(small entity) + 140  (others) + 280	\$0
TOTAL ADDITIONAL FEES						\$306.00

Applicant is enclosing the \$306.00 fee for the new claims. If any further fee should be due, please charge our deposit account 50/1039.

### Conclusion

For at least the above-stated reasons, it is respectfully submitted that the present application is now in condition for allowance and should be allowed.

If any further fee is due for this amendment, please charge our deposit account 50/1039.

Favorable reconsideration is earnestly solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Mark J. Murphy", is written over a horizontal line.

Mark J. Murphy

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Marked-up copy of the amendments made herein:

**IN THE DRAWINGS:**

Please amend the attached figure as shown in red.

**IN THE CLAIMS:**

Please amend the claims as follows:

1. (Amended) A display device comprising:

a pixel portion in which  $(m \times 2n)$  pixels, each including at least one TFT, are arranged in matrix form (both  $m$  and  $n$  are natural numbers);

a source driver for supplying video signals to  $2n$  source signal lines  $S_1, S_2, \dots, S_n, S_{n+1}, S_{n+2}, \dots, S_{2n}$ ;

a first gate driver for supplying selection signals to  $m$  first gate signal lines  $G_{1L}, G_{2L}, \dots, G_{mL}$ ; and

a second gate driver for supplying selection signals to  $m$  second gate signal lines  $G_{1R}, G_{2R}, \dots, G_{mR}$ , wherein:

the pixels connected to the source signal lines  $S_1, S_2, \dots, S_{2n}$  are supplied with the selection signals from the first gate signal lines  $G_{1L}, G_{2L}, \dots, G_{mL}$ ;

the pixels connected to the source signal lines  $S_{n+1}, S_{n+2}, \dots, S_{2n}$  are supplied with the selection signals from the second gate signal lines  $G_{1R}, G_{2R}, \dots, G_{mR}$ ;

the selection signal starts to be supplied to the second gate signal line  $G_{1R}$  while the selection signal is supplied to the first gate signal line  $G_{1L}$ ; and

the selection signal starts to be supplied to the first gate signal line  $G_{[1]2L}$  while the selection signal is supplied to the second gate signal  $G_{1R}$ .

24. (Amended) A method of driving an active matrix display device comprising:

a pixel portion in which  $(m \times 2n)$  pixels, each including at least one TFT, are arranged in matrix form (both  $m$  and  $n$  are natural numbers);

a source driver for supplying video signals to  $2n$  source signal lines  $S1, S2, \dots, Sn, Sn+1, Sn+2, \dots, S2n$ ;

a first gate driver for supplying selection signals to  $m$  first gate signal lines  $G1L, G2L, \dots, GmL$ ; and

a second gate driver for supplying selection signals to  $m$  second gate signal lines  $G1R, G2R, \dots, GmR$ , wherein said method comprises the steps of:

supplying the pixels connected to the source signal lines  $S1, S2, \dots, Sn$  with the selection signals from the first gate lines  $G1L, G2L, \dots, GmL$ ;

supplying the pixels connected to the source signal lines  $Sn+1, Sn+2, \dots, S2n$  with the selection signals from the second gate lines  $G1R, G2R, \dots, GmR$ ; and

[starting to supply the selection signal to the second gate signal line  $G1R$  while the selection signal is supplied to the first gate signal line  $G1L$ ; and

starting to supply the selection signal to the first gate signal line  $G1L$  while the selection signal is supplied to the second gate signal line  $G1R$ ]

sequentially supplying the selection signals to the first gate signal line  $G1L$ , the second gate signal line  $G1R$ , the first gate signal line  $G2L$ , the second gate signal line  $G2R$ ,  $\dots$ , the first gate signal line  $GmL$ , and the second gate signal line  $GmR$  in this order with a delay of a half period between the respective adjacent gate signal lines.

Please add the following new claims:

25. (New) A display device comprising:

a pixel portion in which  $(m \times 2n)$  pixels, each including at least one TFT, are arranged in matrix form (both  $m$  and  $n$  are natural numbers);

a source driver for supplying video signals to  $2n$  source signal lines  $S_1, S_2, \dots, S_n, S_{n+1}, S_{n+2}, \dots, S_{2n}$ ;

a first gate driver for supplying selection signals to  $m$  first gate signal lines  $G_{1L}, G_{2L}, \dots, G_{mL}$ ; and

a second gate driver for supplying selection signals to  $m$  second gate signal lines  $G_{1R}, G_{2R}, \dots, G_{mR}$ , wherein:

the pixels connected to the source signal lines  $S_1, S_2, \dots, S_n$  are supplied with the selection signals from the first gate signal lines  $G_{1L}, G_{2L}, \dots, G_{mL}$ ;

the pixels connected to the source signal lines  $S_{n+1}, S_{n+2}, \dots, S_{2n}$  are supplied with the selection signals from the second gate signal lines  $G_{1R}, G_{2R}, \dots, G_{mR}$ ;

the selection signal starts to be supplied to the second gate signal line  $G_{1R}$  while the selection signal is supplied to the first gate signal line  $G_{1L}$ ; and

the selection signal starts to be supplied to the first gate signal line  $G_{2L}$  while the selection signal is supplied to the second gate signal line  $G_{1R}$ ,

wherein the  $m$  first gate signal lines  $G_{1L}, G_{2L}, \dots, G_{mL}$  of the first gate driver are not connected to the  $m$  second gate signal lines  $G_{1R}, G_{2R}, \dots, G_{mR}$  of the second gate driver.

26. (New) A display device comprising:

a pixel portion in which  $(m \times 2n)$  pixels, each including at least one TFT, are arranged in matrix form (both  $m$  and  $n$  are natural numbers);



a source driver for supplying video signals to  $2n$  source signal lines  $S_1, S_2, \dots, S_n, S_{n+1}, S_{n+2}, \dots, S_{2n}$ ;

a first gate driver for supplying selection signals to  $m$  first gate signal lines  $G_{1L}, G_{2L}, \dots, G_{mL}$ ; and

a second gate driver for supplying selection signals to  $m$  second gate signal lines  $G_{1R}, G_{2R}, \dots, G_{mR}$ , wherein:

the pixels connected to the source signal lines  $S_1, S_2, \dots, S_n$  are supplied with the selection signals from the first gate signal lines  $G_{1L}, G_{2L}, \dots, G_{mL}$ ;

the pixels connected to the source signal lines  $S_{n+1}, S_{n+2}, \dots, S_{2n}$  are supplied with the selection signals from the second gate signal lines  $G_{1R}, G_{2R}, \dots, G_{mR}$ ;

the selection signal starts to be supplied to one of the  $i$ -th gate signal line  $G_{iL}$  and the second gate signal line  $G_{iR}$  while the selection signal is supplied to the other one of the first gate signal line  $G_{iL}$  and the second gate signal line  $G_{iR}$ .

27. (New) A display device comprising:

a pixel portion having a first region and a second region;

a plurality of first pixels arranged in a matrix form in the first region;

a plurality of second pixels arranged in a matrix form in the second region;

a plurality of first gate signal lines arranged in the first region; and

a plurality of second gate signal lines arranged in the second region,

wherein the plurality of first gate signal lines do not extend into the second region and the plurality of second gate signal lines do not extend into the first region, and

wherein while one of the first gate signal lines is supplied with a selection signal, a selection signal starts to be supplied to one of the second gate signal lines, and then while said one of the

second gate signal lines is supplied with said selection signal, a selection signal starts to be supplied to another one of the first gate signal lines.

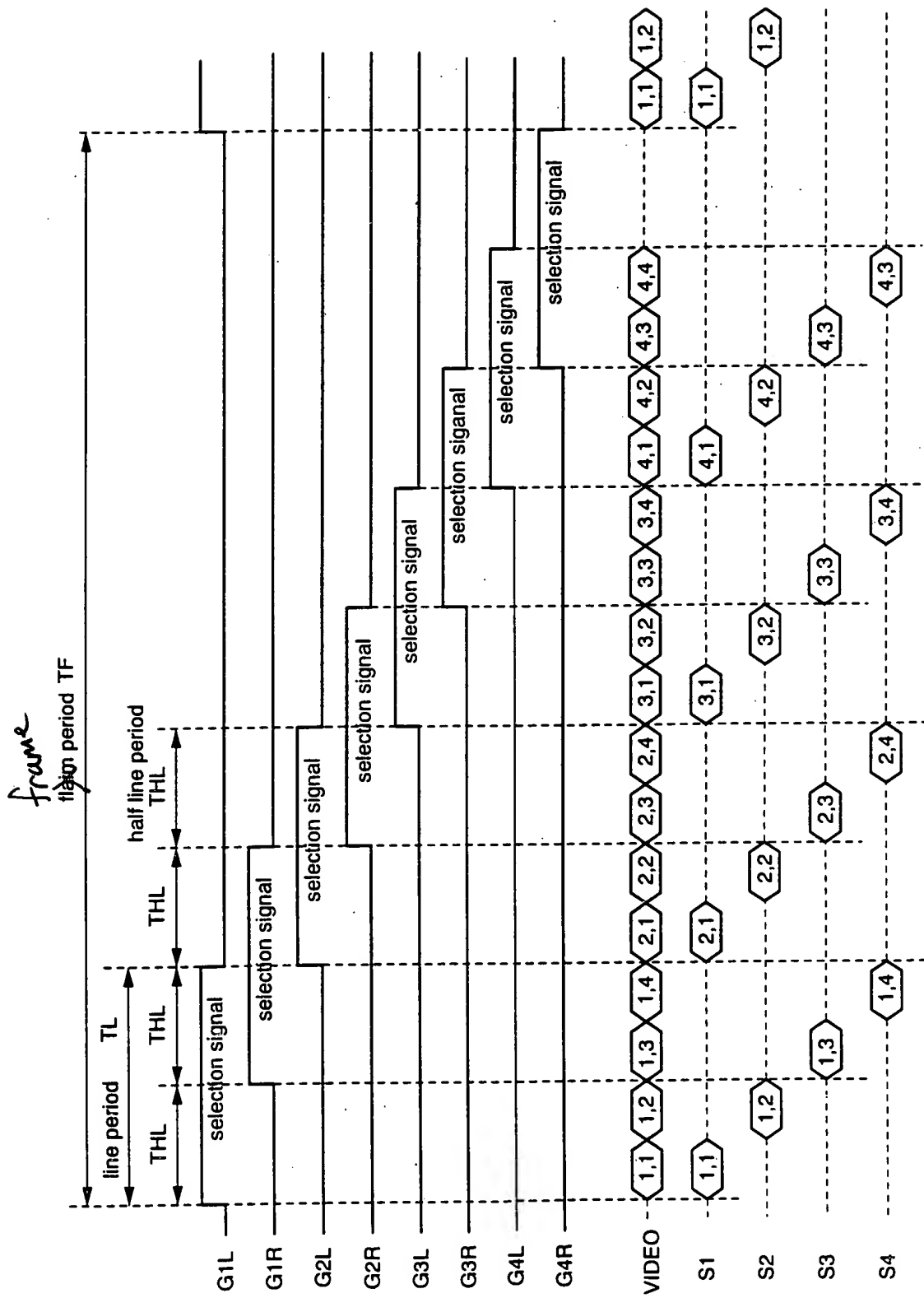


Fig.2

